## Visible and Infrared Imagery for Surveillance Applications: Software and Hardware Considerations

by A. El-Maadi\*, V. Grégoire\*, L. St-Laurent\*,\*\*, H. Torresan\*, B. Turgeon\*, D. Prévost\*\*, P. Hébert\*, D. Laurendeau\*, B. Ricard\*\*\*, X. Maldague\*<sup>1</sup>

## **Abstract**

In this text we summarize recent works done in the use of visible and infrared imagery for surveillance applications. Moreover, we also present latest developments that have occurred in three partner institutions of the Québec, Canada area in this field. Our focus is on both hardware and software. Hardware here concerns channel registration and innovative optical systems while software is related to high level information extraction. Extensive literature review is provided.

This lecture was published in the QIRT Journal 4.1.

<sup>\*</sup>ECE Dept. Université Laval, Québec, Canada

<sup>\*\*</sup>National Optics Institute, Québec, Canada

<sup>\*\*\*</sup>Research and Development for Defence Canada, Québec, Canada

<sup>1.</sup> maldagx@gel.ulaval.ca